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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/552,396  
Filing Date: October 07, 2005  
Appellant(s): AKIYAMA ET AL.

\_\_\_\_\_  
Jacques L. Etkowicz (Reg. No. 41,738)  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 12/23/2010 appealing from the Office action mailed 06/22/2010.

**(1) Real Party in Interest**

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

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**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The following is a list of claims that are rejected and pending in the application:

Claims 1-16 stand rejected.

**(4) Status of Amendments After Final**

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

**(5) Summary of Claimed Subject Matter**

The examiner has no comment on the summary of claimed subject matter contained in the brief.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The summary of claimed subject matter contained in the brief is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

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**(8) Evidence Relied Upon**

Shinji et al. JP 11-213891

Oono JP 03-075596

Kazuya et al. JP 07-162180

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shinji *et al.* (JP11-213891) in view of Applicant cited Oono (JP3-75596) and Kazuya *et al.* (JP07-162180).

Regarding claims 1, 6, 15, and 16, Shinji *et al.* disclose an aging method and device for performing an aging of a plasma display panel (10) using an aging device (1) including an air blowing means (fan, paragraph 23) for cooling a plasma display panel (paragraph 23), the method comprising: cooling the plasma display panel during the aging (paragraph 23). Shinji *et al.* do not explicitly appear to disclose changing at least one of direction or amount of air blown from the air blowing means during the aging process, positioning the air blowing means above a front-face surface of the plasma display panel to direct air to the front-face surface in a direction away from parallel relative to the front-face surface, wherein at least a portion of the air blowing means is disposed within an area defined by the perimeter of the plasma display panel, or wherein a vector normal to the front-face surface of the plasma display panel intersects the air blowing means.

However, in the same field of fan cooling, Oono discloses a fan (6) and an airflow guide (2) that changes the direction of the air to cool a circuit board (3). Further, in the same field of fan cooling, Kazuya *et al.* disclose a plurality of fans (55), some of which are above a front-face surface of the circuit boards (15), that rotated around a parallel surface of a circuit board

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(paragraph 33, Figures 1 and 2) in order to cool the devices uniformly (paragraph 25).

Furthermore, as the fans pivot around shaft (31), the air is directed toward a front-face surface of the circuit board in a direction away from parallel, that is the air has an angle of incidence with the front-face surface of the board.

At the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the references of Shinji *et al.*, Oono, and Kazuya *et al.* to modify device of Shinji *et al.* to include the airflow guide of Oono in order to better cool the panel so as to prevent cracks from forming in the panel and to include fans capable of blowing air toward the PDP in directions other than parallel to the surface of the PDP in order to uniformly cool the PDP (paragraph 25, Kazuya *et al.*).

Further, optimizing the direction of air flow toward the surface of the PDP and positioning the air blowing means in an area defined by the perimeter of the plasma display panel or so that it is intersected by a vector normal to the PDP is a matter of routine optimization and within the skills of one having ordinary skill in the art. One of ordinary skill in the art would position the air blowing means above a front-face surface of the plasma display panel to direct air to the front-face surface in a direction away from parallel relative to the front-face surface in order to uniformly cool the PDP. When air is blown toward the front-face surface of the PDP in a perpendicular direction, air is able to cool all sides of components on the PDP, and the air that cools the panel is at the same temperature (as opposed to air that has been blown parallel and heated by the panel as it travels across the PDP).

Examiner also argues that the position of the air blowing means relative to the PDP and the direction of air flow toward the PDP is an engineering design choice that one of ordinary skill in the art would find obvious.

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Regarding claims 2 and 7, the combination of Shinji *et al.*, Oono, and Kazuya *et al.* disclose the method and device of claims 1 and 6, wherein the air blowing means includes a plurality of air blowing devices (27, paragraph 33, Kazuya *et al.*), and an air blowing amount of at least one of the plurality of air blowing devices is changed (Drawing 2, blown density is controlled, Oono). At the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the references of Shinji *et al.*, Oono, and Kazuya *et al.* to include a plurality of fans and in order to better cool the panel so as to prevent cracks from forming in the panel.

Regarding claims 3 and 8, the combination of Shinji *et al.*, Oono, and Kazuya *et al.* disclose the aging method and device of a plasma display panel according to claims 1 and 6, wherein the air blowing means includes a plurality air blowing device (27, Kazuya *et al.*) and an air blowing direction changeable means provided between the plurality of air blowing devices and the plasma display panel (Figure 2, Oono) so that, during the aging (paragraph 23, Shinji *et al.*), the air blowing direction changeable means changes directions of air blown from the plurality of air blowing devices (Figure 2, Oono). The reason to combine is the same as found in claim 1.

Regarding claims 4 and 9, the combination of Shinji *et al.*, Oono, and Kazuya *et al.* disclose the aging method and device of a plasma display panel according to claims 1 and 6, wherein the air blowing means includes a plurality of air blowing devices (27, paragraph 33, Kazuya *et al.*) so that, during the aging, at least one of the plurality of air blowing devices is moved (paragraph 24, Kazuya *et al.*). The motivation to combine is the same as in claim 1.

Regarding claims 5 and 10, the combination of Shinji *et al.*, Oono, and Kazuya *et al.* disclose the aging method and device of a plasma display panel according to claims 1 and 6, wherein the air blowing means includes a plurality of air blowing devices (27, paragraph 33, Kazuya *et*

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*al.*) so that, during the aging, at least one of the plurality of air blowing devices changes in a direction (drawings 1 and 2, Kazuya *et al.*). The motivation to combines is the same as found in claim 1.

Regarding claims 11 and 13, the combination of Shinji *et al.*, Oono, and Kazuya *et al.* make obvious the aging method and aging device of a PDP according to claims 1 and 6, wherein the cooling of the plasma display panel during the aging includes changing the direction of air blown from the air blowing means from a first direction to at least a second direction (paragraph 33, Figures 1 and 2 of Kazuya *et al.*). The fans cool the circuit boards while rotating around the shaft. At the time of the invention, it would have been obvious to one of ordinary skill in the art to change the direction of the air from the air-blowing means in order to uniformly cool the PDP paragraph 25, Kazuya *et al.*)

Regarding claims 12 and 14, the combination of Shinji *et al.*, Oono, and Kazuya *et al.* make obvious the aging method and aging device of a PDP according to claims 1 and 6, wherein the cooling of the plasma display panel during the aging includes changing the amount of air blown from the air blowing means by at least one additional amount (Drawing 2, blown density is controlled, Oono). At the time the invention was made, it would have been obvious to a person having ordinary skill in the art to change the amount of air blown from the air-blowing means in order to better cool the panel so as to prevent cracks from forming in the panel.

#### **(10) Response to Argument**

Applicant's arguments filed 12/23/2010 have been fully considered but they are not persuasive. Below, references made to the Appeal Brief of 12/23/2010 are made in the form "AB: x", where x denotes the page number. References made to the Final Office Action mailed 06/22/2010 are made in the form of ¶x, where x denotes the paragraph number.

**A. Rejection of claims 1-5, 11 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Shinji In view of Oono and Kazuya**

Appellant argues "...claim 1 includes features neither disclosed nor suggested by the cited art. Namely, positioning air blowing means above a front-face surface of a plasma display panel to direct air to the front-face surface in a direction away from parallel, where at least a portion of the air blowing means is disposed within an area defined by the perimeter, of the plasma display panel" (AB:5-9).

Examiner respectfully disagrees. Claim 1 recites a method comprising "positioning the air blowing means above a front-face surface of the plasma display panel". However, claim 1 does not particularly define what constitutes as the "front-face surface of the plasma display panel". Claim 1 recites a method comprising "at least a portion of the air blowing means is disposed within an area defined by the perimeter of the plasma display panel". However, claim 1 does not particularly define what constitutes as the perimeter of the plasma display panel. A reasonably broad interpretation of claim 1 is that any surface of the plasma display panel can be interpreted at the claimed "front-face surface" and that the "perimeter of the plasma display panel" can include any area defined by the continuous line forming the boundary of any surface of the plasma display panel.

Assuming, arguendo, that the front-face surface of the plasma display panel is the surface described in the instant application's specification, Examiner maintains that the positioning of the fan with respect to the front-face surface of the plasma display panel would have been obvious to one having ordinary skill in the art (§ 8-9). Air blown parallel to the front-face surface of the plasma display panel increases in temperature as it crosses the surface, and areas of the surface furthest from the air blowing means will be cooled less efficiently. Any



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structures extending from the surface will impede the flow of air to areas further from the air blowing means, and again will be cooled less efficiently.

Appellant argues "...both Oono and Kazuya require the fan (fan device) to be positioned below one or more boards, to direct air toward an edge of each board, not to a front-face surface. There is no suggestion in either Oono or Kazuya to position the fan (fan device) in any position other than below the boards" (AB: 8).

Examiner notes that in addition to failing to define the "front-face surface", claim 1 recites "...positioning air blowing means above a front-face surface of a plasma display panel". The word "above" is relative and not defined by the claim. Accordingly, any direction in the prior art can be interpreted to be above the front-face surface.

Appellant argues that the "...prior art must provide a motivation or reason for the working in the art, without the benefit of the appellant's specification, to make the necessary changes in the reference device" (AB: 9).

Examiner notes that MPEP 2143.01 recites:

A statement that modifications of the prior art to meet the claimed invention would have been "well within the ordinary skill of the art at the time the claimed invention was made" because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. Ex parte Levengood, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). \*\*">[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." KSR, 550 U.S. at \_\_\_, 82 USPQ2d at 1396 quoting In re Kahn, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006).<

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Examiner provided some objective reasons to combine the teachings of the references (¶ 8-9).

Appellants argues that "Oono does not disclose or suggest changing, during the aging, at least one of the direction or amount of air blown from the air blowing means with time, as required by claim 1" (AB: 9).

Examiner respectfully disagrees. Oono disclose that air-flow guides (2) change the direction of the air from the air blowing means (6). Furthermore, the amount of air is changed with time because the air-flow guides change (variably control) the density (mass per unit volume) of the air (see page 1).

Appellants argue that "the combination of Oono and Kazuya do not suggest uniformly cooling a plasma display panel, as suggested by the Examiner" (AB: 10). Appellant further argues that Oono teaches away from uniformly cooling the PDP because Oono "discloses a fixed airflow guide which directs air away from a component" (AB: 10).

Examiner respectfully disagrees. Uniformly cooling a circuit board during aging is a known goal of the prior art (see ¶ 25 of Kazuya *et al.*). Oono's air-flow guides are not fixed because they are **variably controlled** to change the density of the air. Further, even if the air-guides of Oono are fixed, the air is still directed toward the circuit board in order to **cool the circuit board**. It is not seen by the examiner where Oono teaches directing air away from the circuit board (component) as argued by the appellant.

Accordingly, Oono does not teach away from uniformly cooling a circuit board as alleged by the Appellant (AB: 10).

**B. Rejection of claims 6-10, 13 and 14 under 35 U.S.C. § 103(a) as being unpatentable over Shinji in view of Oono and Kazuya**

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Appellant argues claim 6 "includes features neither disclosed nor suggested by the cited art. Namely, air blowing means positioned above a front-face surface of a plasma display panel to direct air to the front-face surface in a direction away from parallel, where at least a portion of the air blowing means is disposed within an area defined by the perimeter of the plasma display panel" (AB:11-13).

Examiner respectfully disagrees. Claim 6 recites a method comprising "the air blowing means being positioned above a front-face surface of the plasma display panel". However, claim 6 does not define the "front-face surface of the plasma display panel". Claim 6 recites a method comprising "at least a portion of the air blowing means is disposed within an area defined by the perimeter of the plasma display panel". However, claim 6 does not define the perimeter of the plasma display panel. A reasonably broad interpretation of claim 6 is that any surface of the plasma display panel can be interpreted at the claimed "front-face surface" and that the "perimeter of the plasma display panel" can include any area defined by the continuous line forming the boundary of any surface of the plasma display panel.

Assuming, arguendo, that the front-face surface of the plasma display panel is the surface described in the instant application's specification, Examiner maintains that the positioning of the fan with respect to the front-face surface of the plasma display panel would have been obvious to one having ordinary skill in the art (§ 8-9). Air blown parallel to the front-face surface of the plasma display panel increases in temperature as it crosses the surface, and areas of the surface furthest from the air blowing means will be cooled less efficiently. Any structures extending from the surface will impede the flow of air to areas further from the air blowing means, and again will be cooled less efficiently.

Appellant argues "...both Oono and Kazuya require the fan (fan device) to be positioned below one or more boards, to direct air toward an edge of each board, not to a front-face

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surface. There is no suggestion in either Oono or Kazuya to position the fan (fan device) in any position other than below the boards” (AB: 11).

Examiner notes that in addition to failing to define the “front-face surface”, claim 6 recites “... air blowing means positioned above a front-face surface of a plasma display panel”. The word “above” is relative and not defined by the claim. Accordingly, any direction in the prior art can be interpreted to be above the front-face surface.

Appellant argues that the “...prior art must provide a motivation or reason for the working in the art, without the benefit of the appellant’s specification, to make the necessary changes in the reference device” (AB: 12).

Examiner notes that MPEP 2143.01 recites:

A statement that modifications of the prior art to meet the claimed invention would have been “well within the ordinary skill of the art at the time the claimed invention was made” because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. Ex parte Levengood, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). “[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” KSR, 550 U.S. at \_\_\_, 82 USPQ2d at 1396 quoting In re Kahn, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006).<

Examiner provided some objective reasons to combine the teachings of the references (¶ 8-9).

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Appellants argues that "Oono does not disclose or suggest changing, during the aging, at least one of the direction or amount of air blown from the air blowing means with time, as required by claim 1" (AB: 12).

Examiner respectfully disagrees. Oono disclose that air-flow guides (2) change the direction of the air from the air blowing means (6). Furthermore, the amount of air is changed with time because the air-flow guides change (variably control) the density (mass per unit volume) of the air (see page 1).

Appellants argue that "the combination of Oono and Kazuya do not suggest uniformly cooling a plasma display panel, as suggested by the Examiner" (AB: 13). Appellant further argues that Oono teaches away from uniformly cooling the PDP because Oono "discloses a fixed airflow guide which directs air away from a component" (AB: 13).

Examiner respectfully disagrees. Uniformly cooling a circuit board during aging is a known and common goal of the prior art (see ¶ 25 of Kazuya *et al.*) and within level of ordinary skill in the art/field. Oono's air-flow guides are not fixed because they are **variably controlled** to change the density of the air. Further, even if the air-guides of Oono are fixed, the air is still directed toward the circuit board in order to **cool the circuit board**. It is not seen by the examiner where Oono teaches directing air away from the circuit board (component) as argued by the appellant.

Accordingly, Oono does not teach away from uniformly cooling a circuit board as alleged by the Appellant (AB: 10).

**C. Rejection of claim 15 under 35 U.S.C. § 103(a) as being unpatentable over Shinji in view of Oono and Kazuya**

Appellant argues that the cited prior art neither discloses or suggest "...positioning air blowing means above a front-face surface of a plasma display panel to direct air to the front-

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face surface in a direction away from parallel, where a vector normal to the front-face surface of the plasma display panel intersects the air blowing means" (AB: 14).

Examiner respectfully disagrees. Claim 15 recites a method comprising "positioning the air blowing means above a front-face surface of the plasma display panel". However, claim 15 does not define the "front-face surface of the plasma display panel". Claim 15 recites a method comprising "where a vector normal to the front-face surface of the plasma display panel intersects the air blowing means". However, claim 15 does not define the front-face surface of the plasma display panel. A reasonably broad interpretation of claim 15 is that any surface of the plasma display panel can be interpreted at the claimed "front-face surface" and that the "normal vector" can include any direction normal to any face of the plasma display panel.

Assuming, arguendo, that the front-face surface of the plasma display panel is the surface described in the instant application's specification, Examiner maintains that the positioning of the fan with respect to the front-face surface of the plasma display panel would have been obvious to one having ordinary skill in the art (§ 8-9). Air blown parallel to the front-face surface of the plasma display panel increases in temperature as it crosses the surface, and areas of the surface furthest from the air blowing means will be cooled less efficiently. Any structures extending from the surface will impede the flow of air to areas further from the air blowing means, and again will be cooled less efficiently.

Appellant argues "...both Oono and Kazuya require the fan (fan device) to be positioned below one or more boards, to direct air toward an edge of each board, not to a front-face surface. There is no suggestion in either Oono or Kazuya to position the fan (fan device) in any position other than below the boards" (AB: 14).

Examiner notes that in addition to failing to define the "front-face surface", claim 15 recites "... positioning the air blowing means above a front-face surface of a plasma display

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panel". The word "above" is relative and not defined by the claim. Accordingly, any direction in the prior art can be interpreted to be above the front-face surface.

Appellant argues that the "...prior art must provide a motivation or reason for the working in the art, without the benefit of the appellant's specification, to make the necessary changes in the reference device" (AB: 14-15).

Examiner notes that MPEP 2143.01 recites:

A statement that modifications of the prior art to meet the claimed invention would have been "well within the ordinary skill of the art at the time the claimed invention was made" because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. Ex parte Levengood, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). \*\*\*">[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." KSR, 550 U.S. at \_\_\_, 82 USPQ2d at 1396 quoting In re Kahn, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006).<

Examiner provided some objective reasons to combine the teachings of the references (¶ 8-9).

Appellants argues that "Oono does not disclose or suggest changing, during the aging, at least one of the direction or amount of air blown from the air blowing means with time, as required by claim 1" (AB: 15).

Examiner respectfully disagrees. Oono disclose that air-flow guides (2) change the direction of the air from the air blowing means (6). Furthermore, the amount of air is changed

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with time because the air-flow guides change (variably control) the density (mass per unit volume) of the air (see page 1).

Appellants argue that "the combination of Oono and Kazuya do not suggest uniformly cooling a plasma display panel, as suggested by the Examiner" (AB: 13). Appellant further argues that Oono teaches away from uniformly cooling the PDP because Oono "discloses a fixed airflow guide which directs air away from a component" (AB: 15-16).

Examiner respectfully disagrees. Uniformly cooling a circuit board during aging is a known goal of the prior art (see ¶ 25 of Kazuya *et al.*). Oono's air-flow guides are not fixed because they are **variably controlled** to change the density of the air. Further, even if the air-guides of Oono are fixed, the air is still directed toward the circuit board in order to **cool the circuit board**. It is not seen by the examiner where Oono teaches directing air away from the circuit board (component) as argued by the appellant.

Accordingly, Oono does not teach away from uniformly cooling a circuit board as alleged by the Appellant (AB: 16).

**D. Rejection of claim 16 under 35 U.S.(. § 103(a) as being unpatentable over ShInji in view of Oono and Kazuya**

Appellant argues claim 16 "includes features neither disclosed nor suggested by the cited art. Namely, air blowing means positioned above a front-face surface of a plasma display panel to direct air to the front-face surface in a direction away from parallel, where a vector normal to the front-face surface of the plasma display panel intersects the air blowing means" (AB: 17-19).

Examiner respectfully disagrees. Claim 16 recites a method comprising "the air blowing means positioned above a front-face surface of a plasma display panel ". However, claim 16 does not define the "front-face surface of the plasma display panel". Claim 16 recites a method



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comprising “where a vector normal to the front-face surface of the plasma display panel intersects the air blowing means”. However, claim 16 does not define the front-face surface of the plasma display panel. A reasonably broad interpretation of claim 16 is that any surface of the plasma display panel can be interpreted at the claimed “front-face surface” and that the “normal vector” can include any direction normal to any face of the plasma display panel.

Assuming, arguendo, that the front-face surface of the plasma display panel is the surface described in the instant application’s specification, Examiner maintains that the positioning of the fan with respect to the front-face surface of the plasma display panel would have been obvious to one having ordinary skill in the art (§ 8-9). Air blown parallel to the front-face surface of the plasma display panel increases in temperature as it crosses the surface, and areas of the surface furthest from the air blowing means will be cooled less efficiently. Any structures extending from the surface will impede the flow of air to areas further from the air blowing means, and again will be cooled less efficiently.

Appellant argues “...both Oono and Kazuya require the fan (fan device) to be positioned below one or more boards, to direct air toward an edge of each board, not to a front-face surface. There is no suggestion in either Oono or Kazuya to position the fan (fan device) in any position other than below the boards” (AB: 17).

Examiner notes that in addition to failing to define the “front-face surface”, claim 16 recites “... air blowing means positioned above a front-face surface of a plasma display panel”. The word “above” is relative and not defined by the claim. Accordingly, any direction in the prior art can be interpreted to be above the front-face surface.

Appellant argues that the “...prior art must provide a motivation or reason for the working in the art, without the benefit of the appellant’s specification, to make the necessary changes in the reference device” (AB: 17-18).

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Examiner notes that MPEP 2143.01 recites:

A statement that modifications of the prior art to meet the claimed invention would have been "well within the ordinary skill of the art at the time the claimed invention was made" because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. Ex parte Levengood, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). \*\*\*\*\*[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." KSR, 550 U.S. at \_\_\_, 82 USPQ2d at 1396 quoting In re Kahn, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006).<

Examiner provided some objective reasons to combine the teachings of the references (¶ 8-9).

Appellants argues that "Oono does not disclose or suggest changing, during the aging, at least one of the direction or amount of air blown from the air blowing means with time, as required by claim 1" (AB:18).

Examiner respectfully disagrees. Oono disclose that air-flow guides (2) change the direction of the air from the air blowing means (6). Furthermore, the amount of air is changed with time because the air-flow guides change (variably control) the density (mass per unit volume) of the air (see page 1).

Appellants argue that "the combination of Oono and Kazuya do not suggest uniformly cooling a plasma display panel, as suggested by the Examiner" (AB: 18-19). Appellant further argues that Oono teaches away from uniformly cooling the PDP because Oono "discloses a fixed airflow guide which directs air away from a component" (AB: 19).

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Examiner respectfully disagrees. Uniformly cooling a circuit board during aging is a known goal of the prior art (see ¶ 25 of Kazuya *et al.*). Oono's air-flow guides are not fixed because they are **variably controlled** to change the density of the air. Further, even if the air-guides of Oono are fixed, the air is still directed toward the circuit board in order to **cool the circuit board**. It is not seen by the examiner where Oono teaches directing air away from the circuit board (component) as argued by the appellant.

Accordingly, Oono does not teach away from uniformly cooling a circuit board as alleged by the Appellant (AB: 19).

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/BRITT D HANLEY/

Examiner, Art Unit 2889

Conferees:

/Clayton E LaBalle/  
Supervisory Patent Examiner, Art Unit 2862

/Toan Ton/  
Supervisory Patent Examiner, Art Unit 2889